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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/718,599

Applicant(s)

TAKEZAWA ET AL.

Examiner

Janis L. Dote

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,6-11 and 13-20 is/are pending in the application.
4a) Of the above claim(s) 11 and 13-20 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1,3,4 and 6-10 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☒ Claim(s) 1,3,4,6-11 and 13-20 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 21 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

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1. The examiner acknowledges the cancellation of claim 5 and the amendments to claims 1 and 6 set forth in the amendment filed on Nov. 7, 2005. Claims 1, 3, 4, 6-11, and 13-20 are pending.

2. Claims 11 and 13-20 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. The election filed on Dec. 3, 2004, has been treated as an election **without** traverse.

3. The objections to claims 5 and 6 set forth in the office action mailed on Jul. 8, 2005, paragraph 6, have been withdrawn in response to the cancellation of claim 5 and the amendment to claim 6 set forth in the amendment filed on Nov. 7, 2005.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and

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distinctly claim the subject matter which applicant regards as the invention.

Claim 7 is indefinite in the phrase "the binding resin is a polyester resin" (emphasis added) because it is not clear whether "a polyester resin" recited in claim 7 refers to the "at least a polyester resin" recited in claim 1, from which claim 7 depends, or to another polyester resin.

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 1, 3, 4, and 6-10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

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Instant claim 1 recites that the binding resin "comprises at least a polyester resin having terephthalic acid and an ethylene oxide adduct of bis-phenol A as constituent monomers."

The originally filed specification does not provide an adequate written description of said binding resin. The originally filed specification at page 14, line 3, discloses that "[a]nother embodiment of the invention is an image forming toner (T), wherein the binding resin is a polyester resin." The generic term "polyester resin" does not provide an adequate written description of the sub-generic polyester resin recited in instant claim 1. The originally filed specification does not disclose the polyester resin broadly recited in instant claim 1. Nor does the originally filed specification provide a sufficient description of a representative number of species to provide an adequate written description for the sub-generic polyester resin recited in instant claim 1. In the examples, the originally filed specification only exemplifies one particular polyester resin. That particular polyester is "a sulfonic acid modified polyester resin that included terephthalic acid, ethylene oxide adduct of bis-phenol A, and bis(4-hydroxyphenyl)sulfonic acid as indispensable constituent monomers, and [that] had an acid value of 30 mg/KOH and a softening temperature of 104°C." See the originally filed specification, page 16, line 21, to page 17,

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line 1, and page 20, lines 13-17. The polyester resin recited in instant claim 1 is broader than the particular polyester resin species disclosed in the originally filed specification, because it includes polyester resins that are not limited to the particular polyester resin disclosed in the originally filed specification, e.g., the polyester resin of claim 1 includes polyester resins that do not comprise the monomer bis-(4-hydroxyphenyl)sulfonic acid. The one particular polyester resin disclosed in the originally filed specification does not provide an adequate written description of the sub-generic polyester resin broadly recited in instant claim 1.

8. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

9. Claims 1, 6, 7, 9, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent 10-301332 (JP'332), as evidenced by applicants' admission at page 12, line 8, combined with US 6,087,058 (Semura) and Diamond, Handbook of Imaging Materials, page 169 (Diamond I). See the USPTO English-language translation of JP'332 for cites.

JP'332 discloses a two-component developer comprising a carrier and a toner comprising a styrene-n-butylacrylate-acrylic

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acid binder resin, the colorant carbon black, and the releasing agent decaglyceryl decaurate. Translation, paragraphs 0101-0102, 0104, and 0109; and example 4 in paragraphs 0127-0130. Decaglyceryl decaurate is a polyglycerol ester compound in which the fatty esters are stearate (C18). Decaglyceryl decaurate has a "polymerization degree" of 10 and an esterification degree of 75%. The polymerization degree of 10 is within the range of 9 to 30 recited in instant claim 1. The esterification degree was determined by dividing the number of esters (9) by the number of alcohols in decaglycerol (12). The esterification degree of 75% is within the range of 50% or higher recited in instant claim 1.

As discussed supra, the JP'332 toner comprises the colorant carbon black. JP'332 does not disclose that the colorant carbon black is used as a light absorbing material as recited in the instant claims. However, the instant specification at page 12, line 8, discloses that black pigments such as carbon black can be used as light absorbing materials as recited in instant claim 9. Thus, the JP'332 colorant carbon black meets the compositional limitation recited in instant claim 9. The burden is on applicants to prove otherwise. In re Fitzgerald, 205 USPQ 594 (CCPA 1980).

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JP'332 does not exemplify a toner comprising a charge control agent as recited in instant claim 1. However, JP'332 teaches that the toner may further comprise an "electrification control agent," i.e., a charge control agent. Translation, paragraph 0039, line 3; and paragraph 0044. JP'332 discloses the electrification control agent may be a quaternary ammonium salt complex or a "nigrosine system compound."

The use of positive or negative charge control agents is well known in the art. Diamond I discloses that it is known to add charge control additives to toners when blending the pigment into the polymer resin does not give an adequate charge level or rate of charging. Diamond I further discloses a number of known charge control agents, including nigrosine and metal complexes, that effectively give the toner a positive or negative charge. Thus, the Diamond I teachings apply to both negative and positive charging applications. Diamond I, page 169, section 4.2.3.

It would have been obvious for a person having ordinary skill in the art, in view of the teachings of JP'332 and Diamond I, to add a charge control agent, such as nigrosine, to the toner particles disclosed in JP'332, because that person would have had a reasonable expectation of successfully

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obtaining chargeable toner particles having an adequate charge level and rate of charging.

JP'332 does not disclose that its toner is used in flash fixation as recited in instant claim 9. However, the recitation "is used in flash fixation" is merely a recitation of intended use that does not distinguish the toner recited in the instant claims from the toner rendered obvious over the combined teachings of JP'332 and Diamond I. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See In re Casey, 152 USPQ 235 (CCPA 1967) and In re Otto, 136 USPQ 458, 459 (CCPA 1963).

Instant claim 10 is written in product-by-process format. The esterification degree of 75% of decaglyceryl decaurate was not determined by ¹H-NMR measurement as recited in instant claim 10. However, as discussed supra, the JP'332 decaglyceryl decaurate meets the compositional limitations recited in instant claim 10 and has an esterification degree of 75%, wherein the 75% is within the numerical range recited in instant claim 10. Thus, it appears that the JP'332 decaglyceryl

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decastearate is the same or substantially the same as the polyglycerol fatty acid ester compound recited in the instant claim where the degree of esterification is determined by the process recited in instant claim 10. The burden is on applicants to prove otherwise. In re Marosi, 218 USPQ 289 (Fed. Cir. 1983) and In re Thorpe, 227 USPQ 964 (Fed. Cir. 1985). MPEP 2113.

JP'332 does not exemplify a toner comprising the polyester binding resin recited in instant claim 1. However, JP'322 teaches that the binder resin may equally be a polyester binder resin. Translation, paragraph 0024, line 17; paragraph 0103; and example 5 in paragraphs 0131-0133.

Semura teaches a particular linear toner polyester binder resin that is obtained by reacting monomers comprising an ethylene oxide adduct of bisphenol A and terephthalic acid. See Preparation example 1 of polyester resin A at col. 6. Accordingly to Semura, a toner comprising its particular linear polyester binder resin has excellent blocking resistance, triboelectric charge stability, and low-temperature fixing ability. The toner provides the above properties even under severe environmental conditions, such as low-temperature, low-humidity conditions, or high-temperature, high-humidity conditions. The toner has high transparency and is able to form

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a smooth fixing surface. Col. 1, line 61, to col. 2, line 2, and toner 1 comprising the Semura polyester resin A in Table 1 at col. 11. Semura shows that the toner 1 provides an initial toner image having an image density of 1.65 and a toner image after running 10,000 sheets, having an image density of 1.60.

It would have been obvious for a person having ordinary skill in the art, in view of the teachings of JP'332 and Semura, to use the Semura linear polyester resin as the binder resin in the toner rendered obvious over the combined teachings of JP'332 and Diamond. That person would have had a reasonable expectation of successfully obtaining a toner having the benefits disclosed by Semura.

10. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP'332 combined with Diamond I and Semura, as applied to claim 1 above, further combined with additional teachings in JP'332. See the JPO translation of JP'332 for cites.

JP'332 combined with Diamond I and JP'332 renders obvious a toner as described in paragraph 9 above, which is incorporated herein by reference.

JP'332 does not disclose the amount of decaglyceryl decaurate present in the toner in example 4. However, JP'332

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teaches that the releasing agent can be present in the toner in an amount of 0.5-50% by weight, preferably 1-40% by weight, more preferably 1-30% by weight, of the toner. Translation, paragraph 0036, lines 1-2. The lower limits, i.e., 0.5% by weight and 1% by weight, of the JP'332 ranges are within the ranges of 0.1 to 10% by weight and 1 to 5% by weight, based on the weight of the toner recited in instant claims 3 and 4, respectively. The JP'332 ranges also overlap the amount ranges recited in instant claims 3 and 4. According to JP'332, when the amount of the releasing agent is less than 0.5% by weight, "it becomes easy to produce the so-called offset by which this toner adheres to a fixation roll at the time of elevated-temperature fixation"; and when the amount is greater than 50% by weight, "a toner becomes weak, a toner particle becomes ground . . . by churning within a developing machine."

Translation, paragraph 0036, lines 2-4. Thus, it appears that the prior art recognizes that the amount of the releasing agent is a result-effective variable. The variation of a result-effective variable is presumably within the skill of the ordinary worker in the art.

It would have been obvious for a person having ordinary skill in the art, in view of the teachings of JP'332, to adjust, through routine experimentation, the amount of the releasing

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agent decaglyceryl decastearate in the toner rendered obvious over the combined teachings of JP'332, Diamond I, and Semura, such that the amount is within the ranges recited in instant claims 3 and 4. That person would have had a reasonable expectation of successfully obtaining a toner having sufficient anti-offset and sufficient mechanical durability.

11. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP'332 combined with Diamond I and Semura as applied to claim 1 above, further combined with Diamond, Handbook of Imaging Materials, pages 168-169 (Diamond II).

JP'332 combined with Diamond I and Semura renders obvious a toner as described in paragraph 9 above, which is incorporated herein by reference.

As discussed in paragraph 9, JP'332 exemplifies a toner comprising the colorant carbon black. However, JP'332 teaches that its toner may comprise a coloring agent, and does not limit the type of coloring agent used. Translation, paragraph 0028. JP'332 exemplifies toners comprising a phthalocyanine pigment. Translation, paragraph 0105; and example 2 in paragraphs 0118-0121.

The use of color coloring agents, besides black coloring agents, is well known in the art. Diamond II discloses that the

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"use of pigments other than black are increasingly playing a role in xerography in two applications. The first is a color to be used in addition to black when there is a desire to highlight certain information. Typical colors used for this application are red, blue, green, and brown, made from either a single pigment or a blend of pigments. The other major application is in the creation of full color documents. Here the subtractive set of pigments, cyan, magenta, and yellow, is used."

Diamond II, page 168, lines 30-36. Diamond II discloses that copper phthalocyanine can be used for cyans and blues, azo pigments for yellows, and quinacridones or rhodamines for magentas and reds. Diamond II, page 169, lines 1-3.

It would have been obvious for a person having ordinary skill in the art, in view of the teachings of JP'332 and Diamond II, to use a color colorant as taught by Diamond as the coloring agent in the toner rendered obvious over the combined teachings of JP'332, Diamond I, and Semura. That person would have had a reasonable expectation of successfully obtaining a color toner that can be used in an electrophotographic highlighting process or in an electrophotographic process for forming a full color image.

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12. Applicant's arguments filed on Nov. 7, 2005, with respect to the rejections over JP'332 set forth in paragraphs 9-11 above, have been fully considered but they are not persuasive.

Applicants assert that JP'332 does not teach or suggest the use of a polyester binding resin with constituent monomers of terephthalic acid and an ethylene oxide adduct of bisphenol A as recited in instant claim 1. Applicants further assert that JP'332 does not teach the advantages that can be obtained by combining said polyester with the specific polyglycerol ester compounds of claim 1. Applicants also assert that the Rule 132 declaration, which was executed by Yasushige Nakamura on Oct. 20, 2005, filed on Nov. 7, 2005, shows that the instantly claimed toner provides unexpected results in image density over the prior art.

Applicants' assertions are not persuasive. As discussed in the rejection in paragraph 9 above, JP'332 teaches that the toner binder resin can be a polyester. Semura teaches a particular polyester resin that meets the polyester resin limitations recited in instant claims 1 and 7. Semura also teaches the advantages of using its polyester resin as the binding resin in a toner. For the reasons discussed in paragraph 9 above, the combined teachings of JP'332, Diamond I,

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and Semura render prima facie obvious the toner recited in the instant claims.

Furthermore, the Rule 132 declaration is insufficient to show that the instantly claimed toner provides unexpected results over the prior art. The toners in examples 1-3 of the instant specification are not commensurate in scope with the instant claims. The toners comprise preferred amounts of the polyglycerol ester compound. See instant claims 3 and 4. In addition, the toners in examples 1-3 comprise only one particular polyester, which is a sulfonic acid modified polyester resin that includes "terephthalic acid, ethylene oxide adduct of bis-phenol A, and bis(4-hydroxyphenyl)sulfonic acid as indispensable constituent monomers," and that has an acid value of 30 mg/KOH and a softening temperature of 104°C. Instant claim 1 does not limit the polyester resin to be the particular sulfonic acid modified polyester resin exemplified in examples 1 to 3 of the instant specification. The one particular polyester resin does not exemplify, nor does it permit extrapolation, to the full scope of the polyester resin recited in instant claim 1. It is not fairly representative of the vast variety of polyester resins recited in instant claim 1. Applicants have not shown that any of the argued advantages are obtainable from polyesters that are not the particular sulfonic acid modified

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polyester resin commensurate within the full scope of instant claim 1. Accordingly, applicants' showing is not commensurate with the scope of the exclusion protection he seeks.

Thus, given the welter of unconstrained variables and applicants' limited showings, applicants have not satisfied their burden to show that the full scope of the instantly claimed invention provides unexpected results over the prior art.

Moreover, applicants cannot urge as a basis of patentability advantages based on properties that are not disclosed in their application. In re Davies, 177 USPQ 381, 384, 385 (CCPA 1973). As in Davies, the specification as filed makes no attempt to indicate that the combination of the particular polyester binding resin having constituent monomers of terephthalic acid and an ethylene oxide adduct of bisphenol A recited in instant claim 1 with the polyglycerol ester compounds of claim 1 provides unexpected results in image density. The instant specification at page 4, lines 16-20, states that an object of the invention is to provide an image forming toner which prevents "decrease in image density." The specification at page 5, lines 2-4, discloses that in order to achieve said object, the "image forming toner according to the invention comprises at least a binder resin, a colorant (dye/pigment), and

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a polyglycerol ester compound" as recited in instant claim 1. The instant specification at page 8, lines 17-19, discloses that the "binder resin that is used in the toner according to the invention is not particularly limited, and thermoplastic resins made of various kinds of natural or synthetic polymers can be used" (emphasis added). The specification in examples 1-3 and comparative example 1 exemplifies toners comprising only one particular sulfonic acid modified polyester resin. That particular polyester is "a sulfonic acid modified polyester resin that included terephthalic acid, ethylene oxide adduct of bis-phenol A, and bis(4-hydroxyphenyl)sulfonic acid as indispensable constituent monomers, and [that] had an acid value of 30 mg/KOH and a softening temperature of 104°C." See the instant specification, page 16, line 21, to page 17, line 1, and page 20, lines 13-17. The one particular polyester resin does not exemplify, nor does it permit extrapolation, to the full scope of the polyester resin recited in instant claim 1. The instant specification only reports that comparative toner 1, which does not comprise a polyglycerol ester compound as recited in instant claim 1, provided "an image poor in the transferability and strong in the graininess." The specification did not report the image density of said image. There is no evidence in the instant specification that the

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specification as filed would convey to a person having ordinary skill in the art that the instantly claimed toner comprising a polyester binding resin having constituent monomers of terephthalic acid and an ethylene oxide adduct of bisphenol A combined with the specific polyglycerol ester compounds of claim 1 is superior in image density to those toners that do not comprise the combination of said polyester resin and polyglycerol ester compound.

13. The amendment to claim 1 set forth in the amendment filed on Nov. 7, 2005, added the limitation that the binding resin "comprises at least a polyester resin having terephthalic acid and an ethylene oxide adduct of bis-phenol A as constituent monomers." In view of that amendment and on further consideration of the certified English-language translation of the priority document Japanese Patent Application 2002-345715, filed on Apr. 21, 2005, the examiner has determined that the translation does not provide antecedent basis within the meaning of 35 U.S.C. 112, first paragraph, for the subject matter recited in instant claims 1, 3, 4, and 6-10.

The translation in paragraph [0033] discloses that the toner binder resin may be a polyester resin. The generic term "polyester resin" disclosed in the translation does not provide

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an adequate written description of the sub-generic polyester resin recited in instant claim 1. In the examples, the translation only exemplifies one particular polyester resin. That particular polyester is "a sulfonic acid modified polyester resin that included terephthalic acid, ethylene oxide adduct of bis-phenol A, and bis(4-hydroxyphenyl)sulfonic acid as indispersible constituent monomers, and [that] had an acid value of 30 mg/KOH and a softening temperature of 104°C." Translation, paragraphs [0044] and [0056]. The polyester resin recited in instant claim 1 is broader than the particular polyester resin species disclosed in the translation, because it includes polyester resins that are not limited to the particular polyester resin disclosed in the originally filed specification, e.g., the polyester resin of claim 1 includes polyester resins that do not comprise the monomer bis-(4-hydroxyphenyl)sulfonic acid. The one particular polyester resin disclosed in the translation does not provide an adequate written description of the sub-generic polyester resin broadly recited in instant claim 1.

Thus, applicants have not perfected their claim to foreign priority under 35 U.S.C. 119 for the subject matter cited in instant claims 1, 3, 4, 6-10. Accordingly, Japanese Patent 2003-241418 (JP'418) is prior art to the subject matter cited in

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those claims. Rejections over JP'418 are set forth infra.

14. Claims 1, 3, 4, and 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,578,409 (Kotaki) combined with Japanese Patent 2003-241418 (JP'418). See the USPTO English-language translation of JP'418 for cites.

Kotaki discloses a two-component developer comprising a carrier and a toner. The toner comprises a particular modified polyester resin, carbon black as the colorant, a charge control agent, and a release agent. The polyester resin is obtained by reacting monomers comprising terephthalic acid and an ethylene oxide adduct of bisphenol A. Preparation of modified polyester resin (22) at cols. 39-40 and in Table 8 at col. 41; and example 20 at cols. 44-45. The Kotaki particular polyester resin meets the polyester resin limitations recited in instant claims 1 and 7. The release agent is present in an amount of 2.7 wt% based on the weight of the toner or in an amount of 3 wt% based on the weight of the binder resin. The amounts of 2.7 wt% and 3 wt% were determined from the information provided in example 20. The Kotaki release agent amount of 2.7 wt% based on the total weight of the toner is within the amount ranges recited in instant claims 3 and 4. Kotaki further teaches that the toner colorant can be a color colorant such as Naphthol

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yellow, HANSA yellow, phthalocyanine blue, or red iron oxide. Col. 16, lines 38-40. Said color colorants meet the color colorant limitation recited in instant claim 8. The Kotaki toner in example 20 provides an initial toner image having an image density of 1.32, and a toner image, after running 100,000 sheets, having an image density of 1.34. See Table 9 at col. 47, example 20.

As discussed supra, the Kotaki toner exemplified in example 20 comprises the colorant carbon black. Kotaki does not disclose that the colorant carbon black is used as a light absorbing material as recited in the instant claims. However, the instant specification at page 12, line 8, discloses that black pigments such as carbon black can be used as light absorbing materials as recited in instant claim 9. Thus, the Kotaki colorant carbon black meets the compositional limitation recited in instant claim 9. The burden is on applicants to prove otherwise. Fitzgerald, supra.

Kotaki does not exemplify a toner comprising the polyglycerol ester compound recited in the instant claims. However, Kotaki does not limit the type of release agent used. Kotaki, col. 16, lines 50-52. Kotaki teaches that the release agent usable in its invention may include partially esterified products of fatty acids. Col. 17, lines 15-17.

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JP'418 teaches a polyglycerol fatty acid ester compound, in which the fatty acid esters are palmitate (C16) and behenate (C22). The polyglycerol fatty acid ester compound has a polymerization degree of 6 and an esterification degree of 95%. Translation, paragraphs 0015-0016, and example 1 in paragraph 0018. The esterification degree of 95% is within the range of 50% or higher recited in instant claim 1. JP'418 teaches that said polyglycerol fatty acid ester compound can be used as a low-temperature fixability and blocking resistance enhancer in toners. JP'418 teaches that the addition of its polyglycerol fatty acid ester in the binder resin of toners improves the low temperature fixing property and block resistance of said toners. Paragraph 0005. JP'418 teaches that its polyglycerol fatty acid ester compound may be present in amounts of 3 to 35 parts by weight per 100 parts by weight of the binder resin. Translation, paragraph 0011. The lower limit of 3 parts by weight per 100 parts by weight of the binder resin meets the amount of releasing agent exemplified in the Kotaki toner of example 20. JP'418 further teaches that the binder resin may be a polyester resin. Translation, paragraph 0012.

JP'418 does not exemplify a polyglycerol fatty acid ester compound where the polymerization degree is 9 to 30 as recited in instant claim 1. However, JP'418 teaches that the

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polyglycerol fatty acid ester compound may have a polymerization degree ranging from 2 to 15, which is "calculated from the hydroxyl value." Translation, paragraph 0009. JP'418 discloses that a polyglycerin (i.e., polyglycerol) having a polymerization of 10, which is "calculated by the hydroxyl values," is commercially available as product #750 from Sakamoto Pharmaceutical Industry. Translation, paragraph 0015. The polymerization degree of 2 to 15 overlaps the range of 9 to 30 recited in instant claim 1. A polymerization degree of 10 and the upper limit, 15, of the polymerization degree range of 2 to 15, are within the range of 9 to 30 recited in instant claim 1.

It would have been obvious for a person having ordinary skill in the art, in view of the teachings in JP'418, to use a polyglycerol fatty acid ester compound with an esterification degree of 95% having a polymerization degree within the range recited in instant claim 1, such as 10, as taught by JP'418, as releasing agent in the toner in example 20 of Kotaki. That person would have had a reasonable expectation of successfully obtaining a toner having improved a low temperature fixing property and blocking resistance as taught by JP'418.

Kotaki does not disclose that its toner is used in flash fixation as recited in instant claim 9. However, the recitation

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"is used in flash fixation" is a recitation of intended use, which does not distinguish the toner recited in the instant claims from the toner rendered obvious over the teachings of Kotaki and JP'418. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See In re Casey, 152 USPQ 235 (CCPA 1967) and In re Otto, 136 USPQ 458, 459 (CCPA 1963).

Instant claim 10 is written in product-by-process format. JP'418 does not disclose that its esterification degree of 95% was determined by ^1H -NMR measurement as recited in instant claim 10. However, as discussed supra, the polyglycerol fatty acid ester compound rendered obvious over the teachings of JP'418 meets the compositional limitations recited in instant claim 10 and has an esterification degree of 95%, wherein the 95% is within the numerical range recited in instant claim 10. Thus, it appears that the polyglycerol fatty acid ester compound rendered obvious over the teachings in JP'418 is the same or substantially the same as the polyglycerol fatty acid ester compound recited in instant claim where the degree of esterification is determined by the process recited in instant

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claim 10. The burden is on applicants to prove otherwise.

Marosi, supra; Thorpe, supra; MPEP 2113.

In the instant of compact prosecution, the examiner has considered the showings in the instant specification and in the Rule 132 declaration filed on Nov. 7, 2005, in the context of the instant rejection.

The showings in the instant specification are insufficient for the reasons discussed in paragraph 12 above, which are incorporated herein by reference.

In addition, the showings in the instant specification and in the declaration do not compare to the closest prior art. Kotaki exemplifies a toner comprising a particular modified polyester resin, carbon black as the colorant, a charge control agent, and a release agent. The modified polyester resin is a polyester resin modified with a monohydroxylic compound having a long-alkyl chain of 70 carbon atoms. See Preparation of modified polyester resin (22) at cols. 39-40 and in Table 8 at col. 41; and example 20 at cols. 44-45. The Kotaki particular modified polyester resin meets the polyester resin limitations recited in instant claims 1 and 7. Said particular modified polyester resin is a critical element of the Kotaki invention. See Kotaki, col. 6, lines 3-11, and reference claim 1. Comparative example 1 and the toner exemplified in the

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declaration do not comprise a modified polyester resin as disclosed by Kotaki. Furthermore, unlike the toner exemplified in the declaration, which provided toner images having an image density of 1.10, as discussed in the rejection above, the Kotaki toner in example 20 provided toner images, after running 100,000 sheets, having an image density of 1.34. Accordingly, the toners in the instant specification and in the declaration are not probative comparisons to the Kotaki toner.

15. Applicants' amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicants are reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janis L. Dote whose telephone number is (571) 272-1382. The examiner can normally be reached Monday through Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Mark Huff, can be reached on (571) 272-1385. The central fax phone number is (571) 273-8300.

Any inquiry regarding papers not received regarding this communication or earlier communications should be directed to Supervisory Application Examiner Ms. Claudia Sullivan, whose telephone number is (571) 272-1052.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JLD

Jan. 7, 2006

Janis L. Dote
JANIS L. DOTE
PRIMARY EXAMINER
GROUP 1500
1700